# AGENDA 32<sup>nd</sup> TES SCIENCE TEAM MEETING Caltech – Sharp Auditorium

# June 16, Wednesday

# **Instrument and Algorithm Session**

- 8:30 AM Coffee and Baked Goods
- 9:00 John Worden, Annmarie Eldering, Anne Douglass: Opening Remarks and Schedule
- 9:20 David Rider: TES Instrument Status (PCS, ICS)
- 9:35 Annmarie Eldering: Open discussion of science priorities and future observations: (i.e, if we need to further reduce observations, how we will do it)
- 10:00 Ming Luo / Susan Kulawik / Scott Gluck Version 5 (R12) / Version 6 Algorithm Status:

Ming Luo: R12 / R11 side by side

Susan Kulawik: List of Algorithm Changes from Version 4 to Version 5

Scott Gluck: Status of Processing System

10:20 Bob Herman: Validation Updates (Major updates to version 5, validation papers)

## 10:35 Coffee Break

- 11:00 John Worden: Additions and changes to post Version 5 (R12) Products (N<sub>2</sub>O, delta-d Profiles, CH<sub>4</sub> profiles, and SO<sub>2</sub>)
- 11:20 Karen Cady-Pereira: Post Version 5 (R12) (Methanol, Acetylene, and Formic Acid)

## 11:40 - 1:10 (Lunch)

- 1:10 Richard Eckman: View from Headquarters and Proposal Opportunities
- 1:30 Stan Sander New: Mission Concepts: GeoCape
- 1:50 Paul Hamer "Geo-Cape observing requirements for the prediction of PBL ozone"

## **Chemistry and Climate**

- 2:10 Jennifer Logan "The effects of differences in convection schemes in GEOS-4 and GEOS-5 meteorological fields on CO and ozone in the tropical troposphere as revealed by TES and MLS data"
- 2:30 Jessica Neu "Diagnosing the stratospheric contribution to tropospheric ozone variability using UT/LS ozone correlations"

## 2:50 Coffee break

- 3:15 Tutu Aghedo "Multi-Model comparison of ozone radiative forcing"
- 3:35 Richard Dupont "Ozone Chemistry in Boreal Fires"
- 3:55: Karen Cady-Pereira "NH<sub>3</sub> from TES: Limits and possibilities"
- 4:15 Daven Henze "Inverse modeling constraints on NH<sub>3</sub> emissions using TES observations"

## 4:35 - 6:00 Poster Session

6:30 TES Meeting Dinner - Caltech Rath Al Fresco (\$25-\$30 cash per person to Annmarie)

## **Thursday June 17**

# **Water Cycle Session**

- 8:30 AM Coffee and Baked Goods
- 9:00 Camille Risi "What can we learn from water vapor isotope measurements by satellite about processes controlling tropical tropospheric humidity?"
- 9:20 Jeonghoon Lee: "Influence of variations of large-scale circulation on tropical water vapor and its isotopic composition"
- 9:40 Eric Posmentier: "Atmospheric Isotope Modeling as a Basis For Inferring Hydrologic Processes from Satellite Observations of HDO".

## **Greenhouse Gasses**

10:00 Christian Frankenberg: "CH<sub>4</sub> emissions from SCIAMACHY data"

10:20 Kevin Wecht "Validation of TES Methane with HIPPO data for Adjoint Inverse Modeling"

## 10:40 Coffee Break

11:00 Yaping Xao "What can regional simulations of the ground-based and the TES CH<sub>4</sub> data tell us about high-latitude sources of methane?"

11:20 Annmarie Eldering and Richard Eckman: "Discussion on upcoming Aura Call and next senior review"

#### 12:00 - 1:30 PM Lunch

1:30 Ray Nassar: "Chemistry Updates to GEOS-Chem for modeling CO<sub>2</sub> fluxes"

1:50 Susan Kulawik: "TES CO<sub>2</sub> for carbon cycle science"

2:10 Ray Nassar: "CO<sub>2</sub> flux estimates from TES data"

2:30 Kevin Bowman "CO<sub>2</sub> Adjoint"

2:50 Mingquan Mu "Can we obtain the ratio of CO<sub>2</sub> to CO from TES observations?"

3:10 Annmarie Eldering and John Worden: Closing Comments

## **Posters**

- 1) John Worden: TES results for chemistry and climate: Remote sensing advances for characterizing land/atmosphere exchanges
- 2) John Wong: Comparison of WRF-Chem to TES ozone
- 3) Helen Worden "Instantaneous Radiative Kernels for Tropospheric Ozone: Satellite"

Observations and Model Evaluation"

- 4) Yunsoo Choi: "Contrasting the impact of two wildfires on CO as a biomass burning tracer over Indonesia and North Africa for October-December 2006: The perspective from space with TES"
- 5) Pranjit Saha: Sonde Tool
- 6) Dylan Millet: TES methanol
- 7) Stan Sander Geo-Cape Poster
- 8) Helen Worden: MOPITT PBL CO